

5. INVESTING IN INFRASTRUCTURE

I think it's important also to point out that as we invest in... bridges and roads and transit systems, we are also building a bridge to a cleaner environment. We're building a bridge from welfare to work. We're building a bridge to sustainable communities that can last and grow and bring people together over the long run.

President Clinton

March 1997

For America to continue prospering in the 21st Century, its transportation infrastructure must be safe, integrated, and efficient enough to serve the Nation's growing commerce and mobility demands.

This Nation has the world's most extensive transportation system, with a transportation infrastructure that includes 3.9 million miles of public roads, 180,000 miles of railroad track operated by freight railroads, 25,000 miles of commercially navigable waterways, 5,500 public use airports, 1.4 million miles of privately operated oil and gas pipelines, and over 6,000 transit systems.

Investment in infrastructure is good for America, spurring economic growth; improving safety and public health; enhancing U.S. competitiveness globally; increasing mobility, access, and transportation choice for all Americans; and supporting our national security. To ensure that our national transportation system can meet the demands of the 21st Century, we must build upon the infrastructure we have today and improve its quality to meet tomorrow's need for a system that is intermodal, cleaner, and safer, and that promotes sustainable and inclusive communities. And we must focus our resources through innovative mechanisms, such as the President's new Transportation Fund for America.

Creating the Transportation Fund for America

The budget proposes a new Transportation Fund for America to highlight the importance of investing in transportation and maintaining the Administration's record levels of transpor-

tation spending. The Fund includes all of the Transportation Department's highway, highway safety, transit, and air transportation programs.

- *Highways and Bridges:* The Fund includes \$21.5 billion for the Federal-aid Highways program to maintain and improve the nearly 955,550 miles of eligible roads and bridges. The increased highway and bridge funding in recent years has kept pace with maintenance requirements and reversed the deterioration of our transportation system. On the Interstate system, for example, both pavement and bridge conditions have improved in the 1990s. In addition to traditional grant programs, the Fund provides the resources for innovative approaches to address infrastructure needs. Under the State Infrastructure Banks program, the Federal Government helps States underwrite debt issuance for highway and transit projects. The new Transportation Infrastructure Credit Enhancement Program provides grants to improve the financing for nationally significant projects, including public-private partnerships.
- *Environment:* The Federal Highway Administration's Transportation Enhancements and Congestion Mitigation and Air Quality Improvement Programs, for which the Fund includes a combined \$1.8 billion, address the environmental impacts of transportation by funding bike trails, transit projects, pedestrian facilities, historic preservation projects, water pollution mitigation, beautification projects, and more. These efforts can improve air quality and

help reduce the number of days when air pollution exceeds National Ambient Air Quality Standards.

- *Highway Safety:* The Fund includes \$406 million for the National Highway Traffic Safety Administration (NHTSA), a 22-percent increase over the 1998 level, which will fully fund the Presidential Initiative to Increase Seat Belt Use Nation-wide; the President's Initiative on Drugs, Driving and Youth; and the President's Partnership for a New Generation of Vehicles. These programs help fulfill the President's goal of promoting public health and safety by reducing transportation-related deaths and injuries, and the proposed funding will enable NHTSA to expand the Federal Government's partnership with other levels of government, private organizations, and citizens. NHTSA will continue to work with the medical and health communities to focus on the significant public health implications of highway fatalities and injuries and the associated economic costs to society.
- *Transit:* The Fund provides \$4.6 billion for transit infrastructure, including \$3.7 billion in formula grant funds to maintain and expand transit systems in urban, small urban, and rural areas. Nation-wide, the elderly, people with disabilities, and economically disadvantaged individuals rely heavily on these systems. The Fund includes \$876 million for major capital investments, providing the resources to meet the Administration's full funding grant commitments to construct new, or expand existing, transit systems.

- *Air Transportation:* The Fund includes \$9.7 billion for Federal Aviation Administration (FAA) programs, a seven-percent increase over the 1998 level. It includes \$5.6 billion, a six-percent increase, to continue operating the world's safest air traffic control system; \$2.1 billion, a 14-percent increase, to buy next generation equipment for the system; and \$290 million, a 46-percent increase, to research ways to make the system safer, more secure, and more efficient. It also provides \$1.7 billion in grants to improve the Nation's airports.

Building an Intermodal System

Americans do not view transportation through the lens of individual modes, such as highways, trains, or marine or air travel. Rather, they expect transportation to deliver results—moving people and goods from point to point. Infrastructure investment builds and maintains the individual links in the transportation chain and forges them together into an effective intermodal network.

The budget proposes a record Federal investment of nearly \$30 billion in transportation infrastructure—airports, highways, transit, and trains—continuing the trend of rising investments in infrastructure under this Administration. In 1999, infrastructure investment would rise to a level that is 42 percent higher than the annual average of \$21.1 billion from 1990 to 1993, and 13 percent higher than the annual average of \$26.6 billion from 1994 to 1998 (see Table 5-1). These increases have helped address demands arising from the greater movement of people and goods in a growing economy.

Table 5-1. AVERAGE ANNUAL TRANSPORTATION INFRASTRUCTURE INVESTMENT

(Appropriations, obligation limitations and exempt obligations; dollar amounts in millions)

	1990-1993 Annual Average	1994-1998 Annual Average	1999 Proposed	Percent Change: 1990-1993 Average to 1999	Percent Change: 1994-1998 Average to 1999
Infrastructure Investment	21,145	26,575	29,982	+42%	+13%

Surface Transportation: Surface transportation programs account for much of the Federal, State, and local transportation infrastructure investment dollar. The 1991 Intermodal Surface Transportation Efficiency Act (ISTEA) broke new ground by giving States and localities more flexible and innovative funds for these programs. Over the past six years, the results have become clear:

- The percentage of pavement in poor condition on the National Highway System fell from 11.3 percent in 1993 to 8.9 percent in 1996.
- State and local officials have used flexible funds to target improvements in mobility, economic development, and air quality through projects that selectively foster pedestrian, bicycle, and transit-supportive land uses. Local decisions have directed \$3.2 billion into transit investments—funds that might otherwise have been restricted to highways, regardless of local needs.
- Overall, the expansion of transit systems and purchase of transit vehicles expanded transit capacity by 3.5 percent from 1993 to 1995. Transit investments also have leveraged local development and redevelopment by improving public access to major job centers and fostering land use that supports commercial activity. Transit also eases congestion and pollution by slowing the rate of growth of auto traffic.

The Administration's proposed National Economic Crossroads Transportation Efficiency Act (NEXTEA) builds on these successes and significantly enhances the Nation's ability to promote intermodal development. NEXTEA authorizes \$175 billion for surface transportation programs from 1998 to 2003, and increases core highway program authorizations by more than 30 percent over ISTEA levels. NEXTEA provides even greater flexibility for States and localities to target funds to projects—such as passenger rail, intercity bus, and transit—that best meet community needs.

The budget and reauthorization proposals for the Federal Highway Administration give State and local officials maximum flexibility to meet their local priorities. The budget

provides \$22.4 billion to maintain the highways critical to interstate transportation. In addition, it proposes \$250 million to leverage private financing for new transportation infrastructure projects. Of the \$250 million, \$150 million would capitalize State Infrastructure Banks that enable States to underwrite bonds, enhance credit, and make loans. The other \$100 million would fund the Infrastructure Credit Enhancement grants to improve the financing of public-private projects of national significance. The Alameda Corridor, first funded in 1997, is an example of a public-private project that will improve national competitiveness by contributing to efficiency in domestic handling of international shipments in and out of the Ports of Los Angeles and Long Beach.

The budget also proposes a \$4.6 billion investment in transit infrastructure. Relying on the NEXTEA program structure, the Administration proposes to combine the Discretionary Bus and Fixed Guideway Modernization programs with the Formula Grants program, giving transit properties maximum flexibility to meet their capital needs. Of the transit investments, \$100 million would go for the new Access to Jobs and Training Program, designed to establish partnerships between transportation and human service providers to support new transportation links to entry-level jobs.

Border Gateway Pilot Program: In NEXTEA, the Administration proposes a special border program to improve transportation at international border crossings and along major trade transportation corridors. The proposed \$540 million Border Gateway Pilot Program (\$90 million a year) would develop and implement coordinated, comprehensive border crossing plans and programs, thus promoting the efficient and safe use of border crossings within defined international gateways.

Passenger Rail: Investments in passenger rail are a critical piece of our Nation's transportation infrastructure. The Administration proposes over \$600 million to fund the National Railroad Passenger Corporation, known as Amtrak. This discretionary funding, combined with over \$2.2 billion available to Amtrak under the Taxpayer Relief Act, represents

historic levels of Federal capital support for passenger rail.

The 1998 Amtrak Reform and Accountability Act, Amtrak's first reauthorization since 1992, provides for its most comprehensive restructuring since the early 1980s. Amtrak is a vital component of our national transportation services in densely populated corridors, such as the Northeast; on medium- and short-haul routes; and on trans-continental routes linking cities across the Nation. In many areas of rural America, it is the only transportation alternative to the automobile. With the available funds, Amtrak would be able to make needed capital improvements, including replacing its aging car fleet, upgrading its tracks, and rehabilitating stations and maintenance facilities Nation-wide. With these improvements, Amtrak would be able to attract new customers and better serve the ones it has. The budget also maintains the Administration's commitment to end Federal operating assistance to Amtrak by the year 2002.

New high-speed operations in the Northeast corridor between Boston and Washington are a key part of this greatly improved rail service. As part of its \$621 million request for Amtrak, the Administration proposes \$200 million for the Northeast Corridor Improvement Project to significantly expand the flexibility that travelers enjoy. By the end of 1999, with the completion of electrification between New Haven and Boston, the entire Boston-to-Washington corridor would operate as high-speed rail. In 2000, the Washington-New York market would have two-hour-and-45-minute service, while the New York-Boston market would have three-hour service, compared to current service times of three hours and four-hours-and-20-minutes, respectively. Travelers accustomed to the surface-airport-surface intermodal connections to and from urban centers along the Northeast corridor would have a realistic alternative of walk-aboard, business-center-to-business-center rail service.

Air Transportation—National Airspace System (NAS) Modernization: As air travel grows from 600 million to an estimated one billion passengers a year by 2010, demand for air traffic control (ATC) services will outstrip

the NAS' current capacity. At the same time, equipment for the ATC system, although still safe, is reaching the end of its useful life. As a result, ATC modernization is one of the Administration's highest transportation infrastructure priorities.

In its February 1997 report to the President, the White House Commission on Aviation Safety and Security, led by Vice President Gore and known as the Gore Commission, highlighted the need for increased aviation investment. It noted that "inefficiencies in the system cost airlines in excess of \$3 billion in 1995—costs ultimately paid by passengers." To address these inefficiencies, the Commission recommended that a "modernized system (be) fully operational by the year 2005."

The budget is an important step toward achieving this goal. It proposes about 10 percent average annual increases in aviation capital modernization funding over the next five years. For 1999, the budget invests \$2.1 billion in modernization, compared to the \$1.9 billion that Congress enacted in 1998. It supports continued replacement of air traffic control computers at the Nation's busiest airports and en-route centers, and maintains the safety and integrity of existing systems until they are replaced. It also promotes the development of prototype software tools to allow air traffic controllers to route traffic more efficiently. By 2003, the projected capital modernization budget totals \$3.2 billion (see Table 5-2).

The budget makes longer-term investments in developing advanced navigation, communications, and decision support technology in pursuit of a revolutionary operational concept known as "free-flight." It includes more than \$300 million over five years for the Flight 2000 Demonstration Program to test and validate the equipment and procedures needed to shift from traditional ground-based air traffic control to more collaborative air traffic management. Also, as the Gore Commission recommended, the budget proposes \$100 million in 1999 to purchase 88 explosives detection systems, 125 trace detection devices, 85 carry-on-baggage x-ray machines, and as many as 100 hardened cargo containers for passenger jets.

**Table 5-2. FEDERAL AVIATION ADMINISTRATION
MODERNIZATION AND OPERATIONS FUNDING**

(Budget authority, dollar amounts in millions)

	1997 Actual	1998 Estimate	1999 Proposed	2003 Proposed	Dollar Change: 1998 to 1999	Percent Change: 1998 to 1999
Modernization	1,938	1,875	2,130	3,185	+255	+14%
Operations	4,953	5,337	5,631	6,839	+294	+6%

In addition, the budget proposes significant increases for FAA operations. It increases funding by six percent, to \$5.6 billion, to ensure the continued safe and efficient operation of the National Airspace System and fully fund Gore Commission recommendations (see Table 5-2). The budget provides funds for 185 new air traffic controllers, 150 new maintenance technicians, and 45 more safety inspectors, and more funds to operate and maintain newly acquired systems, expand the aging-aircraft inspection program to cover non-structural systems, develop a standard safety database to share information in accident prevention programs, and perform airport vulnerability assessments.

As aviation funding rises in the next five years, the budget assumes that direct user fees will support more of this investment. Over time, excise taxes will give way to more efficient service-based charges. By 2003, direct user fees, which encourage better system management and more accurately reflect system use, would fund the NAS completely.

Airport Grants: About 3,300 large and small airports are eligible for Federal capital grants to help build runways and make other capital improvements that enhance capacity, safety, security, and noise mitigation. The budget proposes \$1.7 billion for the Airport Grants Program that, along with State and local funds, supplements airport revenues that fund 84 percent of the development costs of commercial service airports. These revenues include about \$1.1 billion a year in local passenger facility charges, authorized in 1990 and paid by passengers to improve the aviation facilities they use. The collections go directly to the local airports for improvement projects.

Promoting a Cleaner and Safer America

In recent years, the Nation has recognized that we have limited ability to add new physical capacity to our transportation system. Furthermore, the effects of new physical capacity on the environment and the quality of our lives are often unacceptable: air and noise pollution, congestion, community disruption, and loss of land for alternate uses are just a few examples. We also must ensure that, as our transportation system expands, we improve the way we protect our families from the hazards of travel.

Safer Roads: Transportation safety, an Administration priority, is an integral component of investment in our highway transportation system. The highway and vehicle safety programs that NHTSA administers reduce fatalities and injuries. The economic cost to society of motor vehicle crashes is an estimated \$150 billion a year, according to an analysis of 1994 NHTSA data. NHTSA's programs have played a significant role in saving over \$30 billion of additional economic costs that would otherwise accrue.

The budget increases funding for NHTSA programs by 22 percent above 1998 levels, fully funding the Presidential Initiative for Increasing Seat Belt Use Nation-wide. This Initiative is designed to increase seat belt use from the current 68 percent to 85 percent in 2000 and 90 percent in 2005. It reflects a broadened, more intensive public education program involving public and private partnerships, and more State participation in enacting strong laws and effectively enforcing them. NHTSA's outreach program and State participation are designed to reduce alcohol and drug-related fatalities and injuries. Further,

NHTSA's research and vehicle programs employ engineering and marketing approaches to improve vehicle safety and enhance our highway safety and infrastructure.

Intelligent Transportation Systems (ITS): In our surface modes, the broad range of technologies that the Administration is developing, testing, and installing under the ITS program hold the promise of meeting greater traffic demand with existing facilities; reducing congestion; and improving safety. ITS programs can also increase personal mobility, cut freight costs, and allow firms to develop customized transportation solutions. Together with the local flexibility that ISTEA offers, these programs helped hold peak-hour congestion growth on urban interstate highways to 2.5 percent from 1990 to 1995, despite greater annual increases in vehicle travel.

Congestion Mitigation and Air Quality Improvements (CMAQ): To make America's transportation system more environmentally sensitive, the budget proposes \$1.3 billion for the CMAQ program, which funds many innovative infrastructure projects to improve the Nation's air quality and reduce congestion. Transit investment and bicycle- and pedestrian-oriented infrastructure projects have provided commuting and recreation alternatives in many of our heavily populated urban areas, and coordinated responses to congestion have enabled local communities to reduce emissions.

Maritime Efficiency: America's roads and railways stop at the border, but our economic and national security interests extend across the globe. Our ports and waterways tie America to the rest of the world. The Coast Guard is developing the Port and Waterway Safety System to improve shipping control and increase safety in major U.S. ports. Investments in maritime Differential Global Positioning Systems and in the national VHF-FM communication system will move vessels more safely and efficiently through our waterways. The Coast Guard is also modernizing its capital assets by replacing 37 World War II-era buoy tenders with 30 technically advanced, minimally-manned vessels that can more efficiently maintain our 50,000 public navigational aids as well as respond to oil spills.

Further, the Maritime Administration administers the Title XI loan guarantee program

that, since 1994, has guaranteed the construction of 296 ships and six shipyard modernization projects, totaling over \$2.1 billion. The budget, which proposes over \$500 million for Title XI loan guarantees, reflects the Administration's support for this valuable program and represents the President's continued commitment to maintain a strong, viable U.S. merchant marine and shipbuilding industry.

Investing in Sustainable and Inclusive Communities

Americans use their transportation system more and more because our infrastructure investment, in the form of transit, passenger rail, and bus systems, gives them a host of options. It particularly benefits those who cannot travel by automobile or other private vehicle due to income, disability, or age.

Community-Oriented Transportation: Since 1993, the Administration has provided \$52 million in transit funding to 21 communities in order to foster community-oriented, customer-friendly transportation facilities and services. The Livable Communities Initiative (LCI) enhances the impact of transportation investments by leveraging State and local funds, using flexible highway funds and other eligible sources. For example:

- One successful LCI initiative in Atlanta led to better pedestrian access to transit stations and the construction of three new gateways to the Atlanta University Center, improving ridership, safety, and access to jobs, and providing new community service and educational opportunities.
- Another LCI project, the Los Angeles Neighborhood Initiative, led to transit-related improvements that attracted neighborhood investment, played a leading role in the city's redevelopment, and helped cut the crime rate by 19 percent.

In addition, from 1994 to 1998, the Administration has provided \$2.1 billion to the States to fund Transportation Enhancement projects, and the budget proposes \$561 million for 1999. This funding supports transportation-related recreational trails, historic preservation, water pollution mitigation, and economic development activities designed to im-

prove the quality of life in our communities. Other Federal grants will continue to relieve aircraft noise problems by helping to sound-proof or relocate residences and public buildings in runway approach zones.

Welfare-to-Work: Transportation infrastructure plays a critical role in welfare reform. The Administration seeks to strengthen the vital connection between transportation and

employment through its Access to Jobs and Training Initiative. The budget provides \$100 million to develop new and supplementary transportation to enhance the access that welfare recipients and other economically disadvantaged persons have to jobs and support activities. More generally, the Administration seeks to forge public-private partnerships that can help get people to the jobs that may lie outside their immediate neighborhoods.